

Application Serial No. 09/632,149
Amendment dated July 11, 2005
Reply to Final Office Action of January 11, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-22. (cancelled)

23. (previously presented) A method of treating an ocular wound after surgery, said method comprising directly contacting an exogenous nucleic acid and an ocular cell *in situ* under conditions permissive for the direct uptake of said exogenous nucleic acid by said ocular cell, whereby said exogenous nucleic acid is expressed in said ocular cell.

24. (previously presented) A method of treating an ocular wound, said method comprising directly contacting an exogenous nucleic acid and an ocular cell *in situ* under conditions permissive for the direct uptake of said exogenous nucleic acid by said ocular cell, said exogenous nucleic acid encoding a protein useful in alleviating said ocular wound, whereby said exogenous nucleic acid is expressed in said ocular cell.

25. (previously presented) The method of claim 24 wherein said exogenous nucleic acid encodes transforming growth factor β (TGF- β).

26. (previously presented) The method of claim 24, wherein said ocular wound is a corneal epithelial wound.

27. (previously presented) The method of claim 26 wherein said corneal epithelial wound is a corneal ulceration.

28. (new) The method of claim 24, wherein the exogenous nucleic acid comprises a growth factor.

Application Serial No. 09/632,149
Amendment dated July 11, 2005
Reply to Final Office Action of January 11, 2005

29. (new) The method of claim 28, wherein the protein encoded by the exogenous nucleic acid is expressed.
30. (new) The method of claim 28, wherein the contacting step comprises infecting the ocular cell with a viral expression vector comprising the exogenous nucleic acid.
31. (new) The method of claim 30, wherein the viral expression vector comprises an adenovirus, retrovirus, adenoassociated virus, or Epstein-Barr virus.
32. (new) The method of claim 28, wherein the ocular wound is a surgical incision.
33. (new) The method of claim 28, wherein the ocular wound is treated after surgery.
34. (new) The method of claim 28, wherein the exogenous nucleic acid sequence is transiently expressed.
35. (new) The method of claim 28, wherein the ocular cell is a corneal cell.
36. (new) The method of claim 35, wherein the corneal cell is a corneal epithelial cell.
37. (new) The method of claim 35, wherein the corneal cell is a corneal endothelial cell.
38. (new) The method of claim 28, wherein the ocular cell is a choroid cell.
39. (new) The method of claim 28, further comprising superficial corneal epithelial debridement before contacting the ocular cell with the exogenous nucleic acid.
40. (new) A method of treating a corneal wound, comprising contacting a corneal cell *in situ* with an adenoviral expression vector comprising an exogenous nucleic acid encoding transforming growth factor β and expressing the exogenous nucleic acid in the corneal cell.

Application Serial No. 09/632,149
Amendment dated July 11, 2005
Reply to Final Office Action of January 11, 2005

41. (new) The method of claim 40, wherein the corneal cell is a corneal epithelial cell.
42. (new) The method of claim 40, wherein the corneal cell is a corneal endothelial cell.
43. (new) The method of claim 40, further comprising superficial corneal epithelial debridement before contacting the corneal cell with the exogenous nucleic acid.